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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,259	11/25/2003	Aaron Francis Snyder	ABUT-0004/B020131	6093

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EXAMINER	
JARRETT, SCOTT L	

ART UNIT	PAPER NUMBER
3623	

MAIL DATE	DELIVERY MODE
05/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,259	SNYDER ET AL.	
	Examiner	Art Unit	
	SCOTT L. JARRETT	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/16/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Non-Final Office Action is in response to Applicant's submission filed November 25, 2003. Currently Claims 1-26 are pending.

Claim Objections

2. Claims 5, 12, 19 and 26 are objected to because of the following informalities. Appropriate correction is required.

Regarding Claims 5 and 19, Claims 5 and 19 recite the acronym SKU wherein it is suggested applicant's 'spell-out' all acronyms the first instance of each acronym (e.g. Stock Keeping Unit).

Regarding Claims 12 and 26, Claims 12 and 26 recite the acronym WIP wherein it is suggested applicant's 'spell-out' all acronyms the first instance of each acronym (e.g. Work-In-Progress).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 6-7, 9-18, 20-21 and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by King et al., U.S. Patent Publication No. 2003/00110104.

Regarding Claim 1 King et al. teach an automated order management system and method comprising:

- vendor management inventory server (system, subsystem – e.g. supply chain server) comprising a demand management system (demand and order management provider) that receives customer data indicative of inventory (Paragraphs 0014, 0035, 0039, 0057; Figures 2, 6, 10, 11);

- a relational database for storing the customer data (Paragraphs 0089, 0095);

- an aspect generator that provides an integrated graphical use interface to the server/system and provides multiple views of the customer data in accordance with customer credentials (e.g. extranet; Paragraphs 0057, 0064, 0075; Figure 7, Step S128).

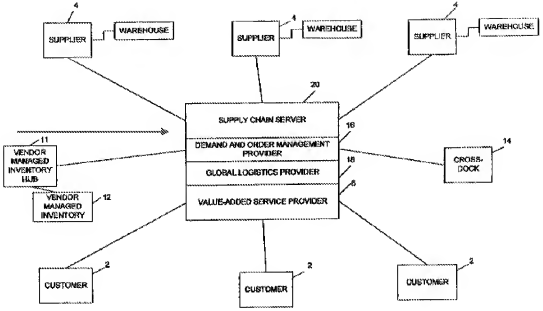
4
SUPPLIER
WAREHOUSE
4
SUPPLIER
WAREHOUSE
4
SUPPLIER
WAREHOUSE
20
SUPPLY CHAIN SERVER
16
DEMAND AND ORDER MANAGEMENT PROVIDER
18
GLOBAL LOGISTICS PROVIDER
6
VALUE-ADDED SERVICE PROVIDER
11
VENDOR MANAGED INVENTORY HUB
12
VENDOR MANAGED INVENTORY
14
CROSS-DOCK
2
CUSTOMER
2
CUSTOMER
2
CUSTOMER

FIG. 2

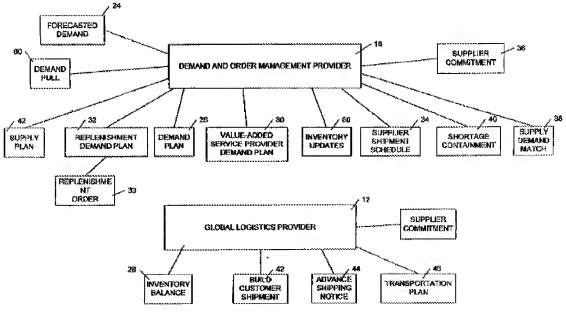
24
FORECASTED DEMAND
80
DEMAND PULL
16
DEMAND AND ORDER MANAGEMENT PROVIDER
36
SUPPLIER COMMITMENT
42
SUPPLY PLAN
32
REPLENISHMENT DEMAND PLAN
26
DEMAND PLAN
30
VALUE-ADDED SERVICE PROVIDER DEMAND PLAN
60
INVENTORY UPDATES
34
SUPPLIER SHIPMENT SCHEDULE
40
SHORTAGE CONTAINMENT
38
SUPPLY DEMAND MATCH
33
REPLENISHMENT ORDER
12
GLOBAL LOGISTICS PROVIDER
SUPPLIER COMMITMENT
28
INVENTORY BALANCE
42
BUILD CUSTOMER SHIPMENT
44
ADVANCE SHIPPING NOTICE
46
TRANSPORTATION PLAN

FIG. 4

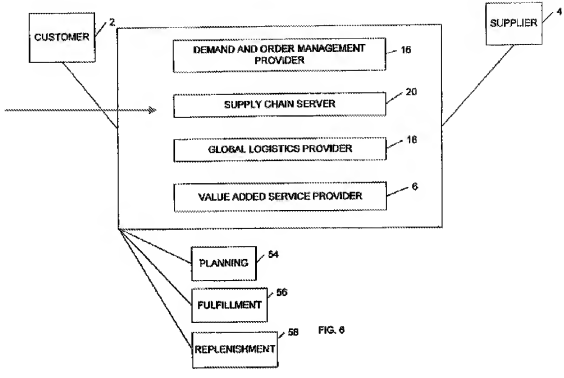
CUSTOMER
2
SUPPLIER
4
DEMAND AND ORDER MANAGEMENT PROVIDER
16
SUPPLY CHAIN SERVER
20
GLOBAL LOGISTICS PROVIDER
18
VALUE ADDED SERVICE PROVIDER
6
PLANNING
54
FULFILLMENT
56
REPLENISHMENT
58

FIG. 8

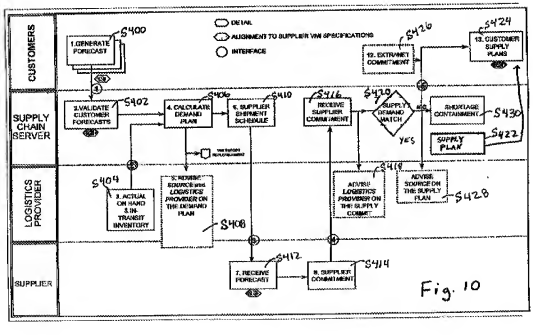
CUSTOMERS
SUPPLY CHAIN SERVER
LOGISTICS PROVIDER
SUPPLIER
DETAIL
ALIGNMENT TO SUPPLIER VMI SPECIFICATIONS
INTERFACE
1.GENERATE FORECAST
S400
2.VALIDATE CUSTOMER FORECASTS
S402
3.
4. CALCULATE DEMAND PLAN
S406
5. SUPPLIER SHIPMENT SCHEDULE
S410
RECEIVE SUPPLIER COMMITMENT
S416
SUPPLY DEMAND MATCH
S420
10. EXTERNAL COMMITMENT
S424
12. CUSTOMER SUPPLY PLANS
SHORTAGE CONTAINMENT
S430
SUPPLY PLAN
S422
yes
no
S404
2. ACTUAL ON HAND & IN-TRANSIT INVENTORY
3C. REVISE SOURCING and LOGISTICS PROVIDER ON THE DEMAND PLAN
S408
ADVISE LOGISTICS PROVIDER ON THE SUPPLY COMMIT
S418
ADVISE SOURCING ON THE SUPPLY PLAN
S428
7. RECEIVE FORECAST
S412
8. SUPPLIER COMMITMENT
S414

Fig. 10

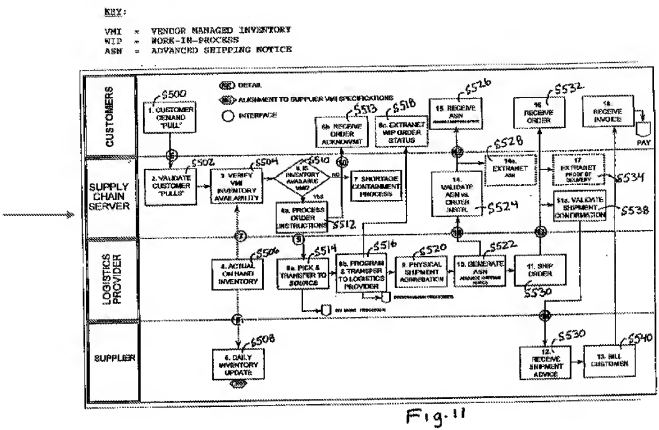

Fig. 11

Regarding Claim 2 King et al. teach an automated order management system and method wherein the customer data is input from an enterprise resource planning system on a periodic basis to the system (vmi server, supply chain server; Paragraphs 0095; Figure 11).

Regarding Claims 6 and 20 King et al. teach an automated order management and vendor management inventory environment comprising (demand management system): inventory control and optimization, demand forecasting, distribution planning

and order replenishment components (systems, subsystems, etc.; Figures 2, 5-6, 10-11).

Regarding Claims 7 and 21 King et al. teach an automated order management and vendor management inventory environment wherein the inventory control component creates a knowledge base (information, database, etc) for future forecasts in accordance with past demand and external parameters related to the product forecasted (Paragraphs 0014, 0040, 0057; Figure 7, 10).

Regarding Claims 9 and 23 King et al. teach an automated order management and vendor management inventory environment wherein the demand forecasting component (system) collects customer-level input and makes forecast changes visible in a collaborative environment (Paragraph 0078; Figure 10).

Regarding Claims 10 and 24 King et al. teach an automated order management and vendor management inventory environment wherein the forecasting component (system) provides reporting of *at least one of*: actual inventory, required inventory, actual inventory usage, required inventory usage, units or dollars, forecasted demand or forecasted industry demand for plant loading (Paragraphs 0014, 0040, 0057, 0073, 0081; Figure 10).

Regarding Claims 11 and 25 King et al. teach an automated order management system and method and vendor management inventory environment further comprising a plurality of views including statistical view for applying mathematical models (e.g. calculations), a marketing view that is family and/or region focused, a sales view that is customer focused and a manufacturing view that is used for resource management (i.e. the plurality of suppliers/vendors, customers, and the like are provided 'views' of the data tailored to their role/responsibilities in the supply chain; Figures 4, 10-11).

It is noted that the 'labels' applied to describe the various 'views' merely represent non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific 'labels' applied to describe the various 'views'. Further, the structural elements remain the same regardless of the specific 'labels' applied to describe the various 'views'. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Regarding Claims 12 and 26 King et al. teach a vendor management inventory and automated order management system and method further comprising replenishing stock levels using forecast results, on hand inventory, WIP inventory and in-transit inventory (Paragraphs 0014-0015, 0040; Figures 4, 10).

Regarding Claim 13 King et al. teach a method and system of demand forecasting in a vendor managed inventory environment comprising (Figures 4, 6, 10-11):

- receiving customer inventory usage data (Paragraphs 0014-0015, 0073);
- forecasting products for a customer based on usage data (Paragraphs 00400073);
- generating forecast reports (Paragraphs 0075, 0077; Figure 10);
- inputting the forecast reports into a replenishment system (Paragraphs 0015, 0041, 0075, 0079-0081);
- determining new orders based on the usage data and forecast reports (Paragraphs 0015-0016, 0041-0043, 0082-0083; Figure 9); and
- forwarding the new orders to an order entry system for fulfillment (Paragraph 0016, 0044-0045, 0087, 0093; Figure 6).

Regarding Claim 14 King et al. teach a method and system of demand forecasting in a vendor managed inventory environment wherein the forecast reports (information) includes revised, marketing, history and/or demand updates/reports/information (Paragraphs 0014, 0040, 0057, 0073, 0078, 0081; Figure 7, 10).

Regarding Claim 15 King et al. teach a method and system of demand forecasting in a vendor managed inventory environment further comprising updating inventory by calculating optimized (e.g. target) inventory levels on a per customer, location and/or product basis (Paragraphs 0016, 0049, 0067, 0111).

Regarding Claim 16 King et al. teach a method and system of demand forecasting in a vendor managed inventory environment further comprising replenishing customer stock levels using forecast, on-hand inventory and unshipped (e.g. WIP) order information (Paragraphs 0014-0015, 0037, 0040, 0052; Figure 4).

Regarding Claim 17 King et al. teach a system and method for vendor managed inventory comprising (Figures 2, 4, 6, 10-11):

- a demand management system that receiving customer product usage data and forecasts demand for products in accordance with the usage data (Paragraphs 0014-0015, 0073);

- an order management system that receives orders from the demand management system an processes (parse, send, forward, etc.) an order for fulfillment (Paragraphs 0068-0069, 0075, 0082-0083; Figures 2, 6, 10-11);

- a relational database system for storing customer information (Paragraphs 0089, 0095); and

- an aspect integrator platform for collaboratively presenting the customer information (e.g. extranet; Paragraphs 0057, 0064, 0075; Figure 7, Step S128; Figures 10-11).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-5, 8, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al., U.S. Patent Publication No. 2003/00110104 as applied to claims 1-2, 6-7, 9-18, 20-21 and 23-2 above, and further in view of Official Notice.

Regarding Claim 3 King et al. teach an automated order management system and method utilizes a forecasting method and creates a forecast (Paragraphs 0014, 0040, 0045, 0073, ; Figure 4, Element 24; Figure 10, S400) and wherein the demand management system decides if an order for additional units of the product to be supplied to the customer are necessary in accordance with said forecast (replenishment, fulfillment, etc.; Paragraphs 0043, 0045, 0069, 0083; Figure 3, Elements 32, 26; Figure 5, Figure 10, S406).

While selecting a forecasting method is vital element of any forecast King et al. does not expressly teach the step of *selecting* a forecasting method as claimed.

Official notice is taken that selecting a forecasting method, technique or approach as part of generating/creating a forecast is an old and very well known

business practice wherein the forecast method selected is a key element in the well known forecasting process as can have a direct impact on the generated forecast.

It would have been obvious to one skilled in the art at the time of the invention that the automated order management system and method as taught by King et al. would have implicitly selected at least one well known forecasting method, technique or approach as part of King et al.'s forecast generation process in view of the teachings of official notice.

Regarding Claim 4 King et al. teach an automated order management system and method wherein the demand management system sends an order to an order management system, wherein the said order management system parses (processes) the order and sends it to suppliers (factories, etc.) for fulfillment (Paragraphs 0068-0069, 0075, 0082-0083; Figures 2, 6, 10-11).

Regarding Claims 5 and 19 King et al. teach an automated order management system and method wherein the database stores *at least one of* SKU, quantity issued, quantity on hand, date or warehouse location for each customer (Paragraphs 0040, 0044, 0502, 0079-0080, 0089; Figure 4).

Regarding Claims 8 and 22 King et al. teach an automated order management and vendor management inventory environment wherein forecasting is performed on a

per customer, per product basis (Paragraphs 0014, 0040, 0057, 0073, 0081; Figure 7, 10).

King et al. is silent on which forecasting model, method or technique is utilized by the automated order management system and method and therefore does not expressly teach that forecasting *may be* based on *at least one of* the following models: time series with moving averages, regression or lifecycle analysis/models as claimed.

Official notice is taken that there exists a plurality of well known and widely used forecasting models, techniques and/or approaches including but not limited to time series with moving averages, regression or lifecycle analysis/models.

It would have been obvious to one skilled in the art at the time of the invention that the system and method as taught by King et al. would have utilized any of a plurality of the very well known and widely utilized forecasting techniques, methods or approaches including but not limited to time series with moving averages, regression or lifecycle analysis/models in view of the teachings of official notice.

Further it is noted that what model the forecast *may be* created with merely represents functional descriptive material wherein the automated order management system and method operates in the same fashion and in a predictable manner

regardless of which of the plurality of old and very well known forecasting methods, techniques or approaches is used to generate the forecast.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lu et al., U.S. Patent No. 5,450,317, teach an automated inventory and order management system and method for managing inventory at a plurality of vendor locations based on forecasted demand.

- Dietrich et al., U.S. Patent No. 5,620,070, teach an automated order, inventory and replenishment management system and method comprising demand, inventory, usage and other data/information.

- Ettl et al., U.S. Patent No. 5,946,662, teach a supply chain management system and method for optimizing inventory levels in a plurality of locations within a supply chain.

- Bellini et al., U.S. Patent No. 5,974,395, teach an automated order management system and method comprising a plurality of views and components including enterprise resource planning, material requirement planning, distribution requirement planning and relational databases.

- Feigin et al., U.S. Patent No. 6,006,196, teach an automated inventory and order fulfillment system and method for replenishing vendor inventory in a supply chain network comprising relational database of customer usage and inventory data, demand forecasting and order management components (systems).

- Singh et al., U.S. Patent No. 7,080,026, teach a demand management system and method for a supply chain network comprising a plurality of forecasts utilizing a plurality of forecasting models.

- Chu et al., U.S. Patent Publication No. 2003/0212614, teach an automated order and inventory management system and method.

- Parket, Demand management and beyond (1996), teaches an automated order management system and method, a demand forecasting system and method in a vendor environment and a vendor inventory management system and method comprising demand forecasting (e.g. net demand), demand management, inventory management, replenishment, order fulfillment, at the SKU, store and customer levels as well as receiving inventory/product usage data from enterprise resource planning systems.

- Purpura, Forecast Views (1998), teaches an collaborative planning, forecasting and replenishment system and method (automated order, demand management and demand forecasting system) using the Voluntary Interindustry Commerce Standard (VICS) model.

- Helms et al., Supply chain forecasting – Collaborative forecasting supports supply chain management (2000), teaches the well known utilization of automated demand forecasting, collaborative forecasting, demand management, inventory management, replenishment management and distribution management systems/methods in supply chains as well as providing multiple 'views' of the data/information for a plurality of groups (marketing, sales, purchasing, etc.).

- McKaige, Collaborating on the supply chain (2001), teaches the well known utilization of collaborative forecasting and planning system and methods.

- Collaborative Planning, Forecasting and Replenishment Guidelines V2.0 (2002), teach a well known standard for implementing and architecting automated order, inventory, replenishment and collaborative demand forecasting systems and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/
Primary Examiner, Art Unit 3623